

soluble lotion such that the add-on level of the lotion is between about 1% to about 10% by weight of the paper product. The lotion comprises water in an amount between about 10% to about 90% by weight of the lotion composition, a water-soluble skin conditioning component in an amount between about 10% to about 75% by weight of the lotion composition, and a viscosity modifier component in an amount between about 2% to about 10% by weight of the lotion composition. The viscosity modifier includes a surfactant that increases the viscosity of the lotion composition when incorporated therein.

In the Office Action, original claims 1-6, 11, 13, 14-23, 26-36, 38-41 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over certain claims of copending Application No. 09/717,939 entitled "Paper Products with Oil-in-Water Emulsions." Without commenting on the propriety of this rejection, Applicants agrees to submit a terminal disclaimer at such time that the claims of the present application are deemed to otherwise be allowable.

Further, original claims 1-43 were also rejected under 35 U.S.C. §112, second paragraph, as being indefinite on eight (8) different grounds. Applicants respectfully submit, however, for at least the reasons set forth below, the claims clearly and particularly set forth the invention and thus satisfy all the requirements of §112.

1. The phrase "add-on level" of original claims 1, 18-19, 22, 29-30, and 41-42 was initially objected to as being vague. Applicants note, however, that this phrase is expressly defined in the specification as the "weight of a paper product treated with

claims.

5. The term "viscosity modifier" was also objected to in original claims 1, 11-12, 22, 30, and 36-37 as being a relative term that renders the claims indefinite.

Applicants initially note, however, that a "viscosity modifier" is not a relative term, such as "about", "essentially", "substantially", and the like. To the contrary, the term "viscosity modifier" clearly requires a material that modifies or alters the viscosity of the lotion composition. In addition, the specification also provides more than an adequate description of this term, noting particularly that "viscosity modifiers can be used to increase the viscosity (i.e., thicken) the water-soluble lotion such that it can be better retained on the surface of the paper product." Thus, one of ordinary skill in the art would be apprised of the meaning of the term "viscosity modifier".

6. The phrases "including" and "includes" was also objected to in original claims 1, 4, 12, 22-25, 30, 35, and 37 as being vague and indefinite. Applicants note that the transitional term "comprising" is synonymous with "including", and is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. MPEP §2111.03.

7. The phrase "liquid coupling component" was also objected to in original claims 1, 13, 22, 30, and 38 as being vague and indefinite because it was not clear what chemical compounds are encompassed by this phrase. Again, it is noted that the specification does in fact provide sufficient information for one of ordinary skill in the art to ascertain the meaning of this phrase. In particular, the specification states that the liquid coupling agents "couple" the ingredients the ingredients of the composition

together to ensure that the lotion composition does not separate into more than one liquid phase. The liquid-coupling agents can also solubilize certain ingredients. (Appl. pg. 9, lines 2-11). Multiple examples of "liquid coupling" agents are provided at pages 9-11 of the specification. In addition, at least one of the references cited by the Examiner also refers to a "coupling agent". (See e.g., U.S. Patent No. 5,661,119 to Hersh, et al., Col 2, lines 59-67). Thus, for at least these reasons, one of ordinary skill in the art would be apprised of the meaning of "liquid coupling component" in view of the specification and the prior art.

8. The phrase "through drying" was also objected to in claim 30 as being vague and indefinite. As expressly noted in the specification, "through drying" is a well known technique for drying a paper web. (Appl. pg. 14, lines 26-29 and Appl. pg. 15, lines 1-12). For instance, the technique of through drying is described in detail in U.S. Patent Nos. 5,048,589 to Cook, et al. and 5,399,412 to Sudall, et al., which are incorporated by reference into the present application on page 15, lines 1-5.

Besides the above-mentioned rejections, original claim 1 was also rejected under 35 U.S.C. §102(e) as being unpatentable over U.S. Patent Publication No. 2001/0018068 to Lorenzi, et al. However, any new prior art (i.e., U.S. Application Publications) created by the changes to 35 U.S.C. §102(e) may only be applied against applications that are filed on or after November 29, 2000 and against applications filed prior to November 29, 2000 that are pending on such date and voluntarily published. Because the present application was filed prior to November 29, 2000 and was not voluntarily published, it is submitted that the Lorenzi, et al. publication is not available

as prior art under 35 U.S.C. §102(e)(1). However, even if certain of the subject matter of Lorenzi, et al. were considered prior art, it would still fail to teach various aspects of the present invention. For instance, Lorenzi, et al. fails to teach a paper web that is applied with a lotion composition at an add-on level of from about 1% to about 10% that contains the claimed components in the claimed concentration ranges.

In addition, original claims 1-43 were also rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 5,593,508 to Gatt, et al. in view of U.S. Patent No. 5,871,763 to Luu, et al., Lorenzi, et al. or U.S. Patent No. 6,120,783 to Roe, et al. and U.S. Patent No. 5,661,119 to Hersh, et al. or U.S. Patent No. 5,756,079 to Cauwet, et al. in further view of WO 93/21383 to Phan, et al. and WO 99/410468 to Vlasbom. However, for at least the reasons set forth below, Applicants respectfully submit that the present claims patentably define over the above-cited references, taken singularly or in any proper combination.

For instance, in the Office Action, it was stated that one of ordinary skill in the art would have found it obvious to modify Gatt, et al. with the teachings of Luu, et al. or Roe, et al. to achieve the limitations of the present claims. Gatt, et al. describes a moist towelette that contains purified water, propylene glycol, PEG 75, lanolin, cocoamphoacetate, polysorbate 20 for cleaning and moisturizing, as well as methyl paraben, propylparaben, 2-bromo-2-nitropropane-1,3-diol, and fragrance. (Col 2, lines 32-41). However, as correctly noted by the Examiner, Gatt, et al. fails to disclose or suggest various limitations of the present claims.

For instance, it has been discovered that the particular selection of the above-

*statements or averments*

mentioned ingredients utilized in the lotion can provide a synergistic effect when applied to a paper product at a certain add-on level (e.g., between about 1% to about 10% by weight of the paper product). (See e.g., Appl. pg. 3). As an example, the present claims require the use of glycerin in an amount of between about 2% to about 15% by weight of the lotion composition. Because glycerin has an affinity for water, it can further enhance the retention of moisture on a person's skin and inhibit transepidermal water loss. (Appl. pgs. 6-7). Thus, as a result of the claimed combination of components, the resulting paper product can remain absorbent while simultaneously imparting certain benefits to the skin, such as inhibiting microbial growth, skin disease, and excessive skin dryness. (Appl. pg. 3). Gatt, et al. simply fails to teach the synergistic combination of the present claims.

*original claimed features*

In the Office Action, however, Gatt, et al. was also cited in conjunction with Luu, et al. Specifically, it was stated that one of ordinary skill would have found it obvious to modify the teachings of Gatt, et al. with the teachings of Luu, et al. because (a) Gatt, et al. and Luu, et al. teach absorbent paper products comprising paper webs and water-soluble lotion composition for use as a cosmetic cleanser and (b) Gatt, et al. and Luu, et al. teach water-soluble lotion compositions comprising propylene glycol, water, skin conditioner, surfactant, and antimicrobial/preservative.

Luu, et al. generally relates to a substrate treated with a nongreasy-feeling lotion containing an emollient and a retention/release agent as base ingredients. However, similar to Gatt, et al., Luu, et al. fails to disclose the use of glycerin in an amount of between about 2% to about 15% by weight of the lotion. As noted above, the use of

glycerin in such an amount can provide the desired moisturization of the skin without adversely affecting other properties of the lotion.

Besides failing to teach one or more limitations of the present claims, Applicant also respectfully submits that one of ordinary skill in the art would not have been motivated to combine the references in the manner suggested in the Office Action. For instance, Luu, et al. indicates that the lotion is preferably substantially free of water, i.e., water is not intentionally added to the lotion. (Col 3, lines 66-67 and Col 4, lines 1-5). An advantage of formulating a water-free, or low water content lotion is said to include the improved storage and handling characteristics of such lotions, and that, under low water content, microorganism growth is reduced. (Col 4, lines 6-23).

On the other hand, Gatt, et al. expressly states that a component of the Baby Fresh® moist towelette is purified water. When formulating a lotion with water, such as in Gatt, et al., one of ordinary skill in the art would not have been motivated to select the specific ingredients and/or concentration ranges of Luu, et al. in view of the express teaching therein of the undesirability of water in the lotion. Thus, at least for the reasons set forth above, Applicants respectfully submit that the present claims patentably define over Gatt, et al. and Luu, et al., taken singularly or in any proper combination.

Nevertheless, as indicated above, Gatt, et al. was alternatively combined with Roe, et al. in the Office Action to achieve the limitations of the present claims. Roe, et al. is directed to a disposable absorbent article (e.g., feminine hygiene products, diapers, diaper holders, diaper inserts, pull-on diapers and training pants, and

incontinence products) applied with a skin care composition. The disposable article can include an absorbent core, topsheet, and backsheet. (Col 6, lines 1-7). The topsheet, for instance, can be formed from a wide range of materials, such as woven and nonwoven materials. (Col 6, lines 46-67).

Referring to Fig. 1, Roe, et al. describes and illustrates a diaper 20 that includes a topsheet 38, a barrier cuff 62, and a gasketing cuff 56. The cuffs 62 and 56 and the topsheet 38 can be applied with a skin care composition to facilitate transfer thereof to a greater amount of the skin. The topsheet 38 is formed from a carded and thermally bonded web. (Col 10, lines 66-67). The barrier cuffs 62 are formed from materials such as polypropylene, polyester, rayon, nylon, foams, nonwovens, plastic films, formed films, and elastic films or foams. (Col 13, lines 1-25). The gasketing cuffs 56 are formed from an elastic material. (Col 14, lines 37-50).

However, contrary to the present claims, the topsheet and cuffs of the diaper described in Roe, et al. do not contain a paper web that is applied with a lotion at the claimed add-on level. In particular, the present claims are generally directed to absorbent paper product that contain a paper web that is absorbent for drying the hands of a user. Furthermore, the present claims require the application of a lotion to the paper web at a certain add-on level so that the absorbency of the resulting paper product is not substantially reduced. The components and requisite add-on level for a skin care composition applied to a diaper, for instance, may significantly differ than the components and add-on level used to apply a lotion to a paper web without substantially reducing the absorbency characteristics of the web. Thus, Applicants

anyway  
lotion not in  
claims

respectfully submit that one of ordinary skill in the art would not have found it obvious to apply the skin care composition of Roe, et al., which is designed for use on diapers and other similar articles, to a paper web to achieve the limitations of the present claims.

In addition, notwithstanding the above, Applicants again note that, similar to Gatt, et al., Roe, et al. also fails to teach the synergistic combination of applying a certain lotion composition to a paper towel at a certain add-on level. As discussed above, for instance, the present claims require the use of glycerin in an amount of between about 2% to about 15% by weight of the lotion composition. Because glycerin has an affinity for water, it can further enhance the retention of moisture on a person's skin and inhibit transepidermal water loss. (Appl. pgs. 6-7). Roe, et al. simply fails to teach the synergistic combination of the present claims. Thus, at least for the reasons set forth above, Applicants respectfully submit that the present claims patentably define over Gatt, et al. and Roe, et al., taken singularly or in any proper combination.

Further, Gatt, et al. was also combined with Lorenzi, et al. in the Office Action to achieve the limitations of the present claims. As indicated above, however, Applicants respectfully submit that Lorenzi, et al. is not prior art to the present application. However, even if considered prior art, Applicants respectfully submit that it fails to cure any of the defects of Gatt, et al. discussed above.

In the Office Action, U.S. Patent No. 5,661,119 to Hersh, et al.; U.S. Patent No. 5,756,079 to Cauwet, et al.; WO 93/21383 to Phan, et al.; and WO 99/410468 to Vlasbom were also combined with the above-cited references to achieve the limitations of the present claims. However, such references fail to cure the defects referenced



above.

As noted above, the specification has been amended to include a description of some fibers that may be used in the present invention. This description is recited identically in U.S. Patent No. 5,399,412 to Sudall, et al. at Column 3, lines 40-49.

Moreover, U.S. Patent No. 5,399,412 to Sudall, et al. was incorporated into the present application in its entirety by reference thereto for all purposes. (See page 15, lines 1-5).

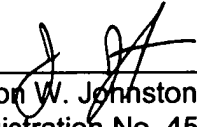
Thus, it is submitted that this amendment does not constitute new matter.

Thus, Applicants respectfully submit that the present claims patentably define over all of the prior art of record and satisfy all of the requirements of 35 U.S.C. §112. It is believed that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Wells is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this response.

Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

Respectfully requested,

DORITY & MANNING, P.A.

  
\_\_\_\_\_  
Jason W. Johnston  
Registration No. 45,675

DORITY & MANNING, P.A.  
P. O. Box 1449  
Greenville, SC 29602-1449  
Phone: (864) 271-1592  
Facsimile: (864) 233-7342

Date: 4/16/02

## **APPENDIX A**

Marked up version of the paragraph beginning on page 3, line 26 and ending on page 4, line 10:

Paper products made in accordance with the present invention can include various types of products, such as towels, wipes, napkins, facial and bath tissue, and the like. The paper product can generally be produced from paper webs having one or multiple layers. Moreover, depending on the desired characteristics, the paper product can contain one or multiple plies where each ply can contain one or more layers. The basis weight of the paper products can vary dependent on the particular application. In some embodiments, for example, the paper product can have a basis weight from about 1 to about 50 pounds per 2,880 square feet (i.e., ream), and in some embodiments, between about 5 to about 45 pounds per square ream. For instance, paper towels can sometimes be formed to have a basis weight of from about 10 to about 45 pounds per ream, and in some embodiments, between about 20 to about 30 pounds per ream. Suitable cellulosic fibers for use in connection with this invention include secondary (recycled) papermaking fibers and virgin papermaking fibers in all proportions. Such fibers include, without limitation, hardwood and softwood fibers as well as nonwoody fibers. Noncellulosic synthetic fibers can also be included as a portion of the furnish. It has been found that a high quality product having a unique balance of properties can be made using predominantly secondary fibers or all secondary fibers.

## **APPENDIX B**

1. (Amended) An absorbent paper product for drying and conditioning the skin of a user, said paper product being selected from the group consisting of towels, wipes, and napkins, said paper product comprising:

a paper web; and

a water-soluble lotion composition applied to said paper web such that the addition level of said lotion composition is between about 1% to about [25%] 10% by weight of said paper product, said lotion composition comprising:

i) water in an amount [up to] between about 10% to about 90% by weight of said lotion composition;

ii) a water-soluble skin conditioning component [in an amount up to about 75% by weight of said lotion composition], said water-soluble skin conditioning component including glycerin in an amount between about 2% to about 15% by weight of said lotion composition;

iii) a viscosity modifier component in an amount [up to] between about 2% to about 10% by weight of said lotion composition, said viscosity modifier component including a surfactant that [is capable of increasing] increases the viscosity of said lotion composition when incorporated therein; and

iv) an optional liquid-coupling component [in an amount up to about 60% by weight of said lotion composition].

4. (Amended) A paper product as defined in claim 1, wherein said water-soluble skin-conditioning component further includes [glycerin,] propylene glycol, sorbitol, or

combinations thereof.

7. (Amended) A paper product as defined in claim 1, wherein said water-soluble skin-conditioning component further includes sorbitol [in an amount up to about 30% by weight of said lotion composition].

9. (Amended) A paper product as defined in claim 1, wherein said water-soluble skin-conditioning component further includes propylene glycol [in an amount up to about 30% by weight of said lotion composition].

14. (Amended) A paper product as defined in claim 1, wherein said lotion composition further comprises an antimicrobial agent [in an amount up to about 20% by weight of said lotion composition].

16. (Amended) A paper product as defined in claim 1, wherein said lotion composition further comprises a preservative [in an amount up to about 5% by weight of said lotion composition].

22. (Amended) An absorbent paper towel for drying and conditioning the skin of a user, said towel having a basis weight from about 10 to about 45 pounds per ream, said towel comprising:

a paper web; and

a water-soluble lotion composition applied to said paper web such that the add-on level of said lotion is between about 1% to about [25%] 10% by weight of said paper towel, said water-soluble lotion composition comprising:

i) water in an amount between about 10% to about 30% by weight of said lotion composition;

ii) a water-soluble skin-conditioning component in an amount between about 10% to about 40% by weight of said lotion composition, wherein said water-soluble skin-conditioning component includes glycerin in an amount between about between about 2% to about 15% by weight of said lotion composition [, propylene glycol, sorbitol, or combinations thereof];

iii) a viscosity modifier component in an amount between about 2% to about 5% by weight of said lotion composition, said viscosity modifier component including a surfactant that [is capable of increasing] increases the viscosity of said lotion composition when incorporated therein; and

iv) an optional liquid-coupling component [in an amount between about 20% to about 40% by weight of said lotion composition], wherein said [liquid-dispersing] optional liquid-coupling component includes a surfactant.

24. (Amended) A paper towel as defined in claim 22, wherein said water-soluble skin-conditioning component further includes sorbitol in an amount between about 5% to about 20% by weight of said lotion composition.

25. (Amended) A paper towel as defined in claim 22, wherein said water-soluble skin-conditioning component further includes propylene glycol in an amount [up] between about 5% to about 20% by weight of said lotion composition.

30. (Amended) A method for forming a paper [product] towel for drying and conditioning the skin of a user, said method comprising:

forming a web from at least one furnish containing fibers and water;

through-drying said web to remove water therefrom; and

thereafter, treating said dried web with a water-soluble lotion composition such that said lotion has an add-on level of between about 1% to about [25%] 10% by weight of said paper [product] towel, said water-soluble lotion composition comprising:

i) water in an amount [up to] between about 10% to about 90% by weight of said lotion composition;

ii) a water-soluble skin conditioning component [in an amount up to about 75% by weight of said lotion composition], said water-soluble skin conditioning component including glycerin in an amount between about 2% to about 15% by weight of said lotion composition;

iii) a viscosity modifier component in an amount [up to] between about 2% to about 10% by weight of said lotion composition, said viscosity modifier including a surfactant that [is capable of increasing] increases the viscosity of said lotion composition when incorporated therein; and

iv) an optional liquid-coupling component [in an amount up to about 60% by weight of said lotion composition].

35. (Amended) A method as defined in claim 30, wherein said water-soluble skin-conditioning component further includes [glycerin,] propylene glycol, sorbitol, or combinations thereof.

42. (Amended) A method as defined in claim 30, wherein said add-on level of said lotion is between about 1% to about 5% by weight of said paper [product] towel.

43. (Amended) A method as defined in claim 30, wherein said paper towel has [product is a towel having] a basis weight between about 15 to about 45 pounds per

ream.